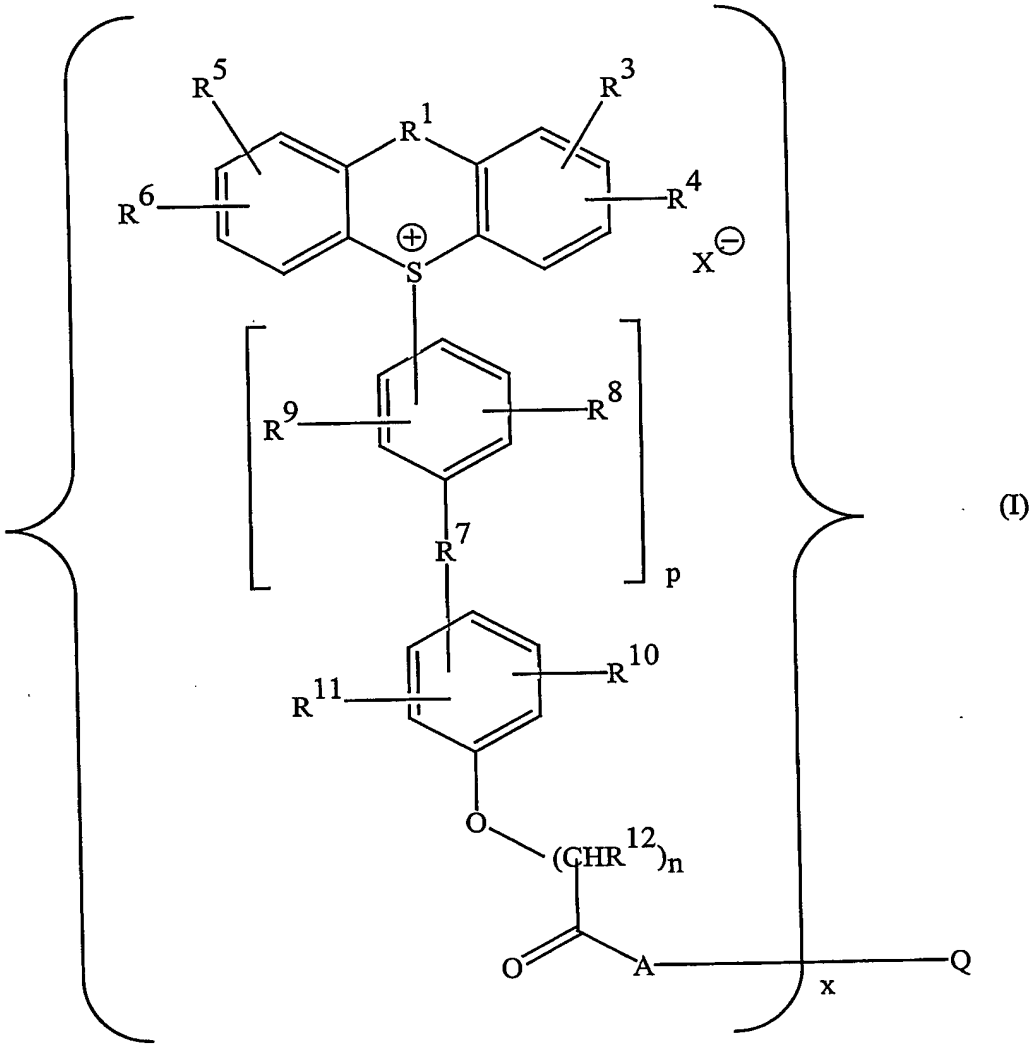
CLAIMS:

1. Compounds of formula (I):



(I)

where:

R^1 represents a direct bond, an oxygen atom, a group $>CH_2$, a sulphur atom, a group >C=O, a group $-(CH_2)_2-$ or a group of formula –N-R^a, where R^a represents a hydrogen atom or a C_1-C_{12} alkyl group;

R^3, R^4, R^5 and R^6 are independently selected from hydrogen atoms and substituents α, defined

below;

R^8, R^9, R^{10} and R^{11} are independently selected from hydrogen atoms, hydroxy groups, C_1-C_4 alkyl groups, and phenyl groups which are unsubstituted or substituted by at least one substituent selected from the group consisting of $C_1 - C_4$ alkyl groups and $C_1 - C_4$ alkoxy groups;

or R^9 and R^{11} are joined to form a fused ring system with the benzene rings to which they are attached;

R^7 represents a direct bond, an oxygen atom or a $-CH_2-$ group;

p is 0 or 1;

said substituents α are: a C_1-C_{20} alkyl group, a C_1-C_{20} alkoxy group, a C_2-C_{20} alkenyl group, a halogen atom, a nitrile group, a hydroxyl group, a C_6-C_{10} aryl group, a C_7-C_{13} aralkyl group, a C_6-C_{10} aryloxy group, a C_7-C_{13} aralkyloxy group, a C_8-C_{12} arylalkenyl group, a C_3-C_8 cycloalkyl group, a carboxy group, a C_2-C_7 carboxyalkoxy group, a C_2-C_7 alkoxycarbonyl group, a C_7-C_{13} aryloxycarbonyl group, a C_2-C_7 alkylcarbonyloxy group, a C_1-C_6 alkanesulphonyl group, a C_6-C_{10} arenesulphonyl group, a C_1-C_6 alkanoyl group or a C_7-C_{11} arylcarbonyl group;

n is a number from 1 to 12;

R^{12} represents a hydrogen atom, a methyl group or an ethyl group, and, when n is greater than 1, the groups or atoms represented by R^{12} may be the same as or different from each other;

A represents a group of formula $—[O(CHR^{13}CHR^{14})_a]_y—$, $—[O(CH_2)_bCO]_y—$, or $-[O(CH_2)_bCO]_{(y-1)}-[O(CHR^{13}CHR^{14})_a]-$, where:

one of R^{13} and R^{14} represents a hydrogen atom and the other represents a hydrogen atom, a methyl group or an ethyl group;

a is a number from 1 to 2;

b is a number from 4 to 5;

Q is a residue of a polyhydroxy compound having from 2 to 6 hydroxy groups;

x is a number greater than 1 but no greater than the number of available hydroxyl groups in Q;

y is a number from 1 to 10; and

X^- represents an anion;

and esters thereof.

2. Compounds according to Claim 1, in which x is a number greater than 1 but no greater than 2, and y is a number from 1 to 10; or in which x is a number greater than 2, and y is a number from 3 to 10.

3. Compounds according to Claim 1 or Claim 2, in which n is a number from 1 to 6.

4. Compounds according to Claim 1 or Claim 2, in which n is 1.

5. Compounds according to any one of Claims 1 to 4, in which R^{12} represents a hydrogen atom.

6. Compounds according to Claim 1 or Claim 2, in which n is a number from 2 to 6 and onegroup R^{12} represents a hydrogen atom, or a methyl or ethyl group and the other or others of R^{12} represent hydrogen atoms.

7. Compounds according to any one of Claims 1 to 6, in which y is a number from 3 to 10..

8. Compounds according to any one of Claims 1 to 6, in which A represents a group of formula $-[O(CHR^{13}CHR^{14})_a]_y-$ where a is an integer from 1 to 2, and y is a number from 3 to 10.

9. Compounds according to any one of Claims 1 to 6, in which A represents a group of formula $-[OCH_2CH_2]_y-$, $-[OCH_2CH_2CH_2CH_2]_y-$ or $-[OCH(CH_3)CH_2]_y-$, where y is a number from 3 to 10.

10. Compounds according to any one of Claims 1 to 6, in which A represents a group of formula $-[O(CH_2)_bCO]_y-$, where b is a number from 4 to 5 and y is a number from 3 to 10.

11. Compounds according to any one of Claims 1 to 6, in which A represents a group of formula $-[O(CH_2)_bCO]_{(y-1)}-[O(CHR^2CHR^1)_a]-$, where a is a number from 1 to 2, b is a number from 4 to 5 and y is a number from 3 to 10.

12. Compounds according to any one of the preceding Claims, in which x is 2 and y is a number from 1 to 10.

13. Compounds according to any one of the preceding Claims, in which y is a number from 3 to 6.

14. Compounds according to any one of the preceding Claims, in which the residue $Q-(A-)_X$ has a molecular weight no greater than 2000.

15. Compounds according to Claim 14, in which the residue $Q-(A-)_X$ has a molecular weight no greater than 1200.

16. Compounds according to Claim 15, in which the residue $Q-(A-)_X$ has a molecular weight no greater than 1000.

17. Compounds according to Claim 16, in which the residue $Q-(A-)_X$ has a molecular weight no greater than 800.

18. Compounds according to any one of the preceding Claims, in which Q is a residue of ethylene glycol, propylene glycol, butylene glycol, glycerol, trimethylolpropane, di-trimethylolpropane, pentaerythritol or di-pentaerythritol.

19. Compounds according to any one of Claims 1 to 18, in which R^3, R^4, R^5 and R^6 are independently selected from hydrogen atoms, C_1-C_{10} alkyl groups, C_1-C_{10} alkoxy groups, halogen atoms, and C_3-C_8 cycloalkyl groups.

20. Compounds according to any one of Claims 1 to 19, in which three or four of R^3, R^4, R^5 and R^6 represent hydrogen atoms.

21. Compounds according to Claim 19, in which one or more of R^3, R^4, R^5 and R^6 represents an ethyl or isopropyl group.

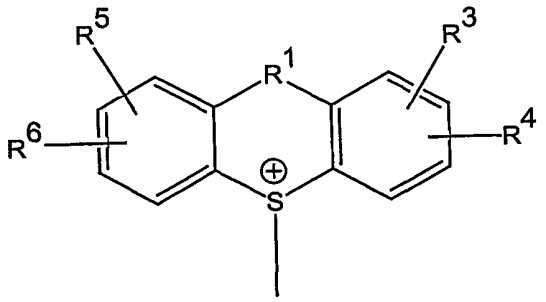
22. Compounds according to any one of Claims 1 to 21, in which two, three or four of R^8, R^9, R^{10} and R^{11} represent hydrogen atoms.

23. Compounds according to any one of Claims 1 to 21, in which all of R^8, R^9, R^{10} and R^{11} represent hydrogen atoms.

24. Compounds according to any one of Claims 1 to 23, in which R^1 represents a group >C=O, a sulphur atom or a direct bond.

25. Compounds according to Claim 24, in which R^1 represents a group >C=O.

26. Compounds according to any one of Claims 1 to 23, in which thatpart of the compound of formula (I) having the formula (IV):



(IV)

(in which R^1, R^3, R^4, R^5 and R^6 are as defined in Claim 1) is a residue of substituted or unsubstituted thianthrene, dibenzothiophene, thioxanthone, thioxanthene, phenoxathiin, phenothiazine or N-alkylphenothiazine.

27. Compounds according to Claim 26, in which said residue is substituted or unsubstituted thioxanthone.

28. Compounds according to Claim 26, in which said residue is substituted or unsubstituted thianthrene.

29. Compounds according to Claim 26, in which said residue is substituted or unsubstituted dibenzothiophene.

30. Compounds according to Claim 26, in which said residue is substituted or unsubstituted phenoxathiin.

31. Compounds according to Claim 26, in which said residue is substituted or unsubstituted phenothiazine or N-alkylphenothiazine

32. Compounds according to any one of the preceding Claims, in which:

R^3, R^4, R^5 and R^6 are individually the same or different and each represents a hydrogen atomor

an alkyl group having from 1 to 4 carbon atoms;

R^7 represents a direct bond;

R^8, R^9, R^{10} and R^{11} represent hydrogen atoms, and especially such compounds where p is 0; and

A represents a group of formula $-[OCH_2CH_2CH_2CH_2]_y-$; and

Q represents a residue of butylene glycol.

33. Compounds according to Claim 1, in which:

R^3, R^4, R^5 and R^6 are individually the same or different and each represents a hydrogen atom or an alkyl group having from 1 to 4 carbon atoms;

R^7 represents a direct bond;

R^8, R^9, and R^{11} represent hydrogen atoms;

R^{10} represents a phenyl group;

p is 0;

A represents a group of formula $-[OCH_2CH_2CH_2CH_2]_y-$; and

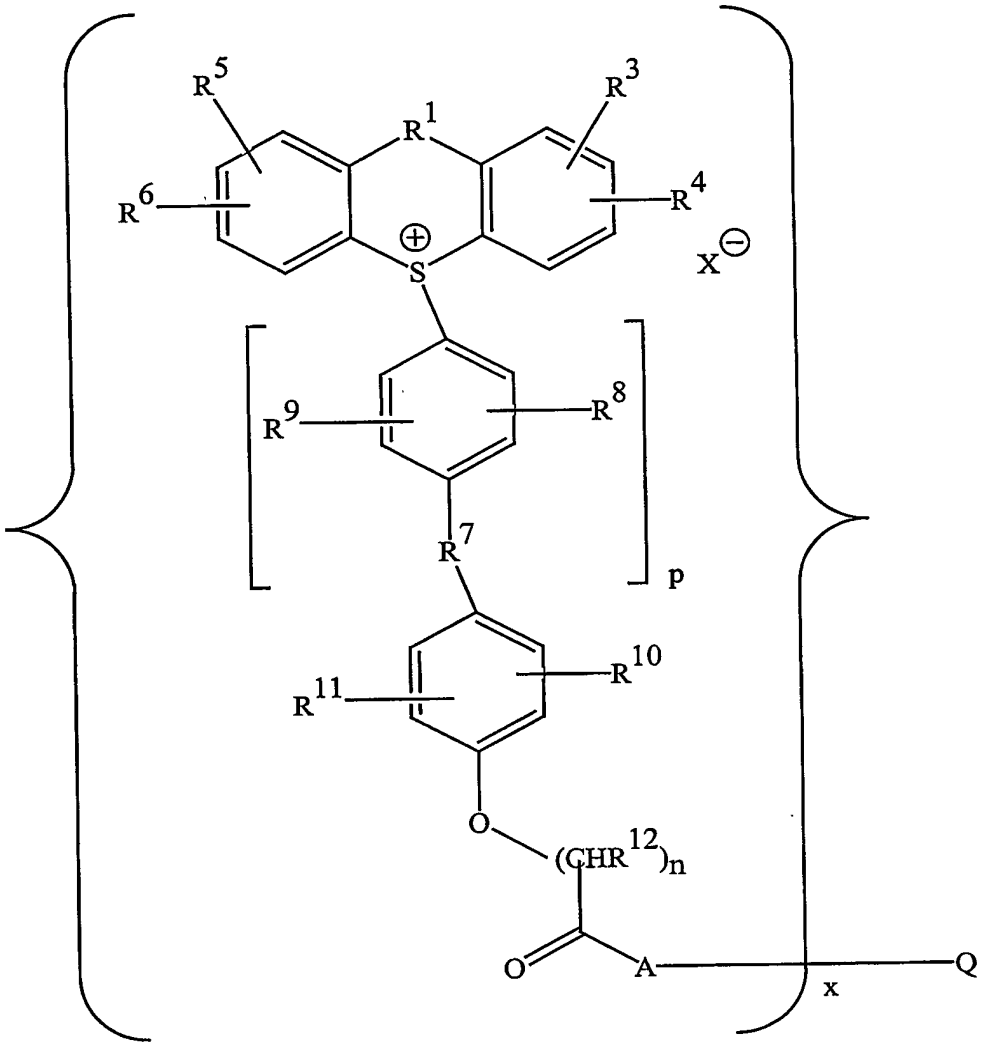
Q represents a residue of butylene glycol.

34. Compounds according to any one of the preceding Claims, in which X^- represents a PF_6^-, SbF_6^-, AsF_6^-, BF_4^-, $B(C_6F_5)_4^-$, $R^aB(Ph)_3^-$(where R^a represents a C_1-C_6 alkyl group and Ph represents a phenyl group), $R^bSO_3^-$ (where R^b represents a C_1-C_6 alkyl or haloalkyl group or an aryl group), ClO_4^- or $ArSO_3^-$ (where Ar represents an aryl group) group.

35. Compounds according to Claim 33, in which X^- represents a PF_6^-, SbF_6^-, AsF_6^-, $CF_3SO_3^-$ or BF_4^- group.

36. Compounds according to Claim 34, in which X^- represents a PF_6^- group.

37. Compounds according to any one of the preceding Claims, having the formula (Ia):



(Ia)

in which R^1, R^3, R^4, R^5, R^5, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, p, x, n, A, Y and X^- are as defined in Claim 1.

38. An energy-curable composition comprising: (a) a polymerisable monomer, prepolymer or oligomer; and (b) a photoinitiator which is a compound of formula (I), as claimed in any one of Claims 1 to 37.

39. A process for preparing a cured polymeric composition by exposing a composition according to Claim 38 to curing energy.

40. A process according to Claim 39, in which the curing energy is ultraviolet radiation.